



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,525	07/24/2003	Sang Seok Lee	8733.871.00-US	8162
30827	7590	04/18/2006		
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			EXAMINER SCHATZ, CHRISTOPHER	
			ART UNIT	PAPER NUMBER

1733

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,525

Applicant(s)

LEE ET AL.

Examiner

Christopher T. Schatz

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 20-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 6-14, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayafuji et al. (US 2003/0205333) for the same reasons as presented in paragraph 2 of examiner's office dated November 15, 2005.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoshi et al. (JP 2000-284295) in view of Machida et al. '578, and optionally Cram '132 for the same reasons as presented in paragraph 5 of examiner's office dated November 15, 2005.

5. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoshi et al. and Machida et al. as applied above, and in further view of Kubota et al. '053 for the same reasons as presented in paragraph 6 of examiner's office dated November 15, 2005.

Response to Arguments

Applicant's arguments filed February 14, 2006 have been fully considered but they are not persuasive. Applicant states "The structure of claim 1 of the present invention is different from the Hayafuji structure in that Hayafuji does not disclose or suggest an upper stage fixed to the upper chamber unit for securing a first substrate; a lower stage fixed to the lower chamber unit for securing a second substrate. The Examiner alleges that elements 21 and 12 are the upper stage and upper chamber units respectively, however Hayafuji discloses that element 21 is the frame body (para. (0042)) and that element 12 is the top lid (para. (0041))." This argument is not found convincing because applicant's claim as written, does not present any structural or physical limitations that uniquely differentiate applicant's recited "upper stage" from element 21 of Hayafuji. Regardless of what term Hayafuji uses with respect to element 21, applicant should note that the claimed "upper stage" reads on element 21 since, in addition to being connected to the upper chamber 12, it supports the upper retention head 10 and is therefore part of the means for securing substrate 3. With respect to element 12, applicant should note that Hayafuji defines element 12 as the "chamber top lid." Examiner asserts that this reads on the term "upper chamber

Art Unit: 1733

unit” since applicant does not present any structural or physical limitations that uniquely differentiate applicant’s recited “upper chamber unit” from element 12 of Hayafuji. Additionally, examiner asserts that element 12 as shown in figure 5 of Hayafuji is analogous to applicant’s element 210 as shown in figure 5 of the specification since Hayafuji’s element 12 (upper chamber unit) cooperates with Hayafuji’s element 13 (lower chamber unit) to form a hermetically sealed chamber.

As to Satoshi and Machida, applicant states that “In addition, as the Examiner acknowledges, neither Satoshi nor Machida teach or suggest ‘elastic members arranged between the upper and lower chamber units and the upper and lower stages’ as recited in claim 1.”

Examiner never made such an acknowledgement. On page 6 of the office action dated November 15, 2005, examiner stated “Although Machida et al. is silent as to the presence of elastic members on the *upper* part of the apparatus, one of ordinary skill in the art would have readily understood that placement of the elastic members 108 between both the upper chamber and upper stage and lower chamber and lower stage of Satoshi et al. respectively, would maximize the ability of Satoshi’s apparatus to apply uniform pressure during bonding, thus creating an apparatus capable of producing a high quality of the bond.” Applicant should note that examiner only acknowledged that Machida et al. did not explicitly disclose elastic members between the *upper* stage and the *upper* chamber unit. Applicant states that examiner’s assertion that it is obvious to add elastic members is impermissible hindsight. Applicant should note that Machida et al., which like Satoshi is directed to the liquid crystal panel art, explicitly discloses elastic members between a lower stage and a lower chamber unit and further provides motivation (uniform pressure application) as to why one of ordinary skill in the art would have been

Art Unit: 1733

motivated to modify Satoshi by placing said elastic members between the stage and the chamber unit (see page 6 of the office action dated November 15, 2005). Thus examiner asserts that such an obviousness statement is not hindsight. As to placing elastic members between the upper stage and upper chamber unit of Satoshi, examiner respectfully asserts that the advantages disclosed by Machida of placing elastic members between the lower chamber unit and lower stage would also be realized if said members were applied between the upper chamber unit and upper stage (see page 6 of the office action dated November 15, 2005). Furthermore, additional suggestion to use elastic members between the upper and lower chamber units and the upper and lower stages is found in Cram which suggests using upper springs in addition to lower springs to obtain proper sealing. Applicant is advised that one cannot show nonobviousness by attacking references individually and in a vacuum of each other as a rejection under 35 U.S.C. 103 is a consideration relating to the combined teachings of the references (and not each reference in a vacuum of the others).

As to claims 4 and 5, applicant failed to address examiner's statement that use of conical or plate shaped springs is well known in the art, and thus the use of conical or plate shaped springs is now taken by examiner be admitted prior art. MPEP 2144.03.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

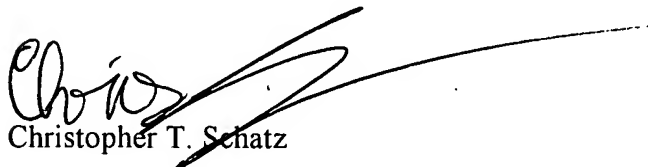
Art Unit: 1733

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Christopher T. Schatz** whose telephone number is **571-272-1456**. The examiner can normally be reached on 8:00-5:30, Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Christopher T. Schatz


RICHARD CRISPINO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700